
Introduction

This document provides configuration guidelines for implementing Meridian data features in Meridian 1 systems. Use the traffic and service tables in this document to determine your system requirements.

Service facilities allocated when engineering Meridian data features include the following: Data Line Cards (DLC) or Asynchronous Interface Line Cards (AIRC) and station line circuit packs, trunk circuit packs, Add-on Data Modules (ADM), or Asynchronous Interface Modules (AIM) or Multi Channel Data Systems—Asynchronous Card (MCDS—AC) ports, and computer ports modem pool equipment. The AIRC is only used with the AIM. This publication gives recommendations for the distribution of these facilities in various application types.

References to ADMs imply all data modules or MCDS-AC ports unless stated otherwise.

You can use the publication *Meridian 1 system engineering* (553-3001-151) to determine other equipment calculations, such as those for provisioning tone and digit switches, DIGITONE receivers, conference circuit packs, and overall shelf and cabinet requirements.

Description

The Meridian data features integrate dial-up data switching capabilities with voice calling capabilities from telephone sets, and they extend to data users several Meridian 1 system and station calling features.

When implementing the Meridian data features, be aware of the two types of traffic using your system: voice traffic and data traffic.

- Voice traffic characteristics typically reflect homogeneous patterns because this type of traffic is generated for a single application: conversations between people. When actual holding times for voice calls are not known, assume certain average holding times per call (for example, 2 to 5 min) when engineering your Meridian 1 system.
- Data traffic, however, can be produced by many kinds of data processing applications. This variety results in heterogeneous traffic patterns where holding times for data calls differ widely, dependent upon the specific data application. For example, data-call holding times can range from several minutes in a simple inquiry-response application to several hours in a remote job-entry application. Because of this wide range of call patterns, use of an average holding time for data calls (often considered to be about 20 to 30 min) can result in under- or over-engineering in actual applications.

While the anticipated calling rate must also be considered when engineering for voice and data traffic, the call holding time distribution is the more important consideration in engineering the Meridian data features. In general, as the call holding time increases, the calling rate decreases.

Related documents

For complete descriptions of the Meridian data features, refer to these documents:

- *QPC723 RS-232 Interface Line Card description, installation, and operation* (553-2731-106)
- *QMT21 High Speed Data Module description, installation, and operation* (553-2731-107)
- *QPC918 High Speed Data Card description, installation, and operation* (553-2731-108)
- *Enhanced Asynchronous Interface Line Unit description and formats* (553-2731-203)
- *Meridian data features operation and tests* (553-2731-300)
- *NT7D16 Data Access Card description and operation* (553-3001-191)
- *X11 input/output guide* (553-3001-400)

Note: For the purposes of this document, Meridian 1 refers to Meridian SL-1 ST, NT, RT, and XT machines, as well as Meridian 1 system options 21, 51, 61, 71, and 81.